This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-9 (Canceled).

10. (Currently Amended) An image sensing apparatus comprising:

a single solid-state image sensing element having matrix-like arranged first ~~and second~~ to fourth image sensing areas with substantially the same size, ~~both~~ all of the first ~~and second~~ to fourth image sensing areas being arranged on a single plane, green color filters being arranged on the first and fourth image sensing areas which are arrayed on one diagonal line of the matrix, and red and blue color filters being arranged on the second and third image sensing areas which are arrayed on the other diagonal line of the matrix;

a photographing optical system that respectively forms first ~~and second~~ to fourth object images on the first ~~and second~~ to fourth image sensing areas; and

a signal processing device that processes an output signal from said image sensing element,

wherein each of the first and ~~second~~ fourth image sensing areas has a matrix of a plurality of pixels arranged at a pitch a in the horizontal direction and a pitch b in the vertical direction on a light-receiving surface, the first and ~~second~~ fourth image sensing areas have a positional relationship in which the first and ~~second~~ fourth image sensing areas are separated a×h×c in the horizontal direction and b×c in the vertical direction (where h is a positive integer and c is

constant), said image sensing element forms first and ~~second~~ fourth images which are formed to have an identical spectral distribution and have substantially the same fields of view, and said signal processing device corrects a misregistration of the first and fourth images based on a relationship of the pixels arrayed in a slanting direction, and generates a composite image signal based on the first and ~~second~~ fourth images.

11. (Original) The apparatus according to claim 10, wherein said signal processing device corrects a change in spacing between the first and second images during processing of an output signal, and forms a composite image signal based on the first and second images.

Claims 12-33 (Canceled).

34. (Previously Presented) The apparatus according to claim 10, wherein the photographing optical system includes a photographing lens and a stop having a plurality of apertures, the stop being arranged in parallel with the single image sensing element.

35. (Previously Presented) The apparatus according to claim 10, wherein the single image sensing element is a single CCD or CMOS element.

36. (Previously Presented) The apparatus according to claim 10, wherein the single image sensing element has an image sensing surface defining the single plane and including the first and second image sensing areas.

37. (Previously Presented) The apparatus according to claim 36, wherein the first and second image sensing areas have formed thereon microlenses.